Complete Summary

GUIDELINE TITLE

Management of Barrett's Esophagus.

BIBLIOGRAPHIC SOURCE(S)

Society for Surgery of the Alimentary Tract (SSAT). Management of Barrett's esophagus. Manchester (MA): Society for Surgery of the Alimentary Tract (SSAT); 2002. 3 p.

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Barrett´s esophagus

GUIDELINE CATEGORY

Diagnosis
Management
Treatment

CLINICAL SPECIALTY

Family Practice
Gastroenterology

Internal Medicine
Surgery

INTENDED USERS

Physicians

GUIDELINE OBJECTIVE(S)

To guide primary care physicians to the appropriate utilization of surgical procedures on the alimentary tract or related organs

TARGET POPULATION

Patients with Barrett´s esophagus

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis

1. Assessment of symptoms
2. Endoscopy
3. Biopsy of columnar mucosa

Treatment/Management

1. Medical therapy
    - Proton pump inhibitors
    - H-2 receptor antagonists
    - Prokinetic agents
2. Surgical antireflux procedure
    - Fundoplication (Nissen, Hill, Belsey, Dor, Toupet procedures)
3. Surveillance endoscopy and biopsy
4. Photodynamic therapy, other energy sources, or excisional techniques (Note: these techniques are considered investigational)

MAJOR OUTCOMES CONSIDERED

- Control of symptoms
- Prevention of gastroesophageal reflux
- Risk of development of or progression to dysplasia and adenocarcinoma

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Not stated

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not applicable

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

The Society for Surgery of the Alimentary Tract (SSAT) guidelines are based on statements and recommendations that were overwhelmingly supported by clinical evidence. Each represents a consensus of opinion and is considered a reasonable plan for a specific clinical condition.

(See companion document Gadacz TR, Traverso LW, Fried GM, Stabile B, Levine BA. Practice guidelines for patients with gastrointestinal surgical diseases. J Gastrointest Surg 1998;2:483-484.)

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

The guidelines were reviewed by several committee members and then by the entire committee on several occasions. Each guideline was then sent back to the original author for final comment and reviewed again by the committee. Each guideline was approved by the Board of Trustees of the Society for Surgery of the Alimentary Tract and final comments were reviewed by the committee.

(See companion document Gadacz TR, Traverso LW, Fried GM, Stabile B, Levine BA. Practice guidelines for patients with gastrointestinal surgical diseases. J Gastrointest Surg 1998;2:483-484.)

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Symptoms and Diagnosis

Patients with Barrett's esophagus may experience the typical symptoms of gastroesophageal reflux disease (GERD) (i.e., heartburn, regurgitation, dysphagia), atypical symptoms of GERD (i.e. asthma, cough, repeated pneumonia, chest pain), or may be relatively asymptomatic. Because heartburn is so common in the general population, the symptoms may be ignored by patients or their physicians until serious complications develop. Barrett's esophagus can develop despite symptomatic control of GERD; therefore, all patients who require long term medical therapy should be considered for endoscopic evaluation to detect the development of Barrett's metaplasia. Diagnosis of Barrett's metaplasia requires biopsy of the columnar mucosa. To exclude the presence of dysplasia in Barrett's, current recommendations include multiple biopsies taken in a systematic fashion throughout the entire length of columnar mucosa.

Treatment

The goals of treatment of Barrett's esophagus in the absence of dysplasia are essentially the same as for uncomplicated GERD: 1) control of symptoms and 2) prevention of gastroesophageal reflux (which may also reduce the risk of the development of, or progression to, dysplasia and adenocarcinoma). Therapeutic options include medical therapy with proton pump inhibitors, H-2 receptor antagonists, and/or prokinetic agents, or a surgical antireflux procedure. There are advantages and disadvantages of each. Medical therapy is directed at acid suppression. It is noninvasive and is effective at controlling reflux symptoms and maintaining the healing of esophagitis. However, many patients treated medically will continue to demonstrate reflux on pH testing, which may contribute to the development of dysplasia and adenocarcinoma.

Surgical antireflux therapy effectively controls the symptoms of reflux, prevents both acid and nonacid reflux, and has been shown to be superior to medical therapy in several prospective studies for the treatment of GERD. There is suggestive evidence that antireflux surgery may halt the progression of Barrett's

esophagus to dysplasia and adenocarcinoma more effectively than medical therapy; this remains controversial. Fundoplication is the surgical procedure of choice for control of gastroesophageal reflux. Fundoplication can usually be accomplished using minimally invasive techniques, which require a short hospital stay and convalescence. Serious complications are rare.

Because the abnormal mucosa generally does not disappear with treatment, patients with documented Barrett's esophagus should have surveillance endoscopy and biopsy every 2 years, regardless how the underlying GERD is treated. Because inflammation can be confused with dysplasia, patients demonstrating low-grade dysplasia should be treated with intensive medical therapy with the goal of complete acid suppression, then rebiopsied at approximately 3 months. If low-grade dysplasia is confirmed, surveillance should be performed annually to rule out progression to high-grade dysplasia and/or cancer. If high-grade dysplasia is detected and confirmed by two expert pathologists, such patients should be referred to a center with expertise in esophageal resection, since there is a 40-60% likelihood of occult cancers in these patients.

There are several innovative techniques designed to ablate or excise the abnormal mucosa. These include photodynamic therapy, other energy sources, or excisional techniques. There are studies that have documented reversal of Barrett's metaplasia to squamous epithelium, but no studies to date have documented that this results in a decreased risk of adenocarcinoma. In addition, squamous mucosa may regrow over incompletely eradicated columnar mucosa, rendering it endoscopically invisible without abolishing the risk of malignant transformation. These techniques should be considered experimental at this time as data are being accumulated regarding the efficacy and complications associated with each of them. At this time, these investigational nonoperative therapies should be reserved for patients with high grade dysplasia who pose significant operative risks. Their role, in comparison to surgery, for the management of patients with high grade dysplasia will be clarified by further study.

Indications for Surgery

Surgery should be considered for patients who do not respond to medical therapy, have complications of gastroesophageal reflux (such as a stricture), are noncompliant with medical therapy, or are totally dependent upon medical treatment to prevent recurrence of their symptoms. Some patients choose surgery due to the expense and inconvenience of long-term medical therapy and concern about the possible consequences of long-term acid suppression. The indications for surgery in patients with Barrett's esophagus are addressed in another SSAT guideline (See Barrett's Esophagus). There are several innovative endoscopic techniques aimed at treating reflux disease. The long-term effectiveness of these procedures has not been established.

Fundoplication may be more cost effective than long-term medical therapy, and it has been clearly shown to improve the patient's quality of life. The most common surgical procedures include those described by Nissen, Hill, Belsey, Dor, and Toupet. These techniques are designed to create a functional lower esophageal sphincter and to repair a hiatal hernia if present. The most common antireflux procedure is the Nissen fundoplication or a modification of this technique, which

involves mobilization and wrapping of the fundus of the stomach completely around the lower esophagus.

All surgical procedures incorporate some form of fundoplication, which is a wrap of the gastric fundus completely or partially around the distal esophagus. The Belsey procedure is performed through a thoracotomy and the others are usually performed using either open abdominal or laparoscopic approaches.

Qualifications

The qualifications of a surgeon to perform any endoscopic or operative procedure should be based on education, training, experience, and outcomes. At a minimum, the surgical treatment of Barrett's esophagus should be carried out by surgeons who are certified or eligible for certification by the American Board of Surgery, the Royal College of Physicians and Surgeons of Canada, or the equivalent.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Medical therapy is noninvasive and is effective at controlling reflux symptoms and maintaining the healing of esophagitis.
- Surgical antireflux therapy effectively controls the symptoms of reflux, prevents both acid and nonacid reflux, and has been shown to be superior to medical therapy in several prospective studies for the treatment of GERD.
- There is suggestive evidence that antireflux surgery may halt the progression of Barrett's esophagus to dysplasia and adenocarcinoma more effectively than medical therapy; this remains controversial.
- Fundoplication has been clearly shown to improve the patient's quality of life.

POTENTIAL HARMS

Many patients treated medically will continue to demonstrate reflux on pH testing, which may contribute to the development of dysplasia and adenocarcinoma.

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

These guidelines have been written by the Patient Care Committee of the Society for Surgery of the Alimentary Tract (SSAT). Their goal is to guide primary care physicians to the appropriate utilization of surgical procedures on the alimentary tract or related organs and they are based on critical review of the literature and expert opinion. Both of the latter sources of information result in a consensus that is recorded in the form of these Guidelines. The consensus addresses the range of acceptable clinical practice and should not be construed as a standard of care. These Guidelines require periodic revision to ensure that clinicians utilize procedures appropriately, but the reader must realize that clinical judgment may justify a course of action outside of the recommendations contained herein.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Society for Surgery of the Alimentary Tract (SSAT). Management of Barrett's esophagus. Manchester (MA): Society for Surgery of the Alimentary Tract (SSAT); 2002. 3 p.

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2002 Oct 7

GUIDELINE DEVELOPER(S)

Society for Surgery of the Alimentary Tract, Inc - Medical Specialty Society

SOURCE(S) OF FUNDING

Society of Surgery of the Alimentary Tract, Inc.

GUIDELINE COMMITTEE

Patient Care Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Not stated

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available from the Society for Surgery of the Alimentary Tract, Inc. Web site.

Print copies: Available from the Society for Surgery of the Alimentary Tract, Inc., 900 Cummings Center, Suite 221-U, Beverly, MA 01915; Telephone: (978) 927-8330; Fax: (978) 524-0461.

AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- Gadacz TR, Traverso LW, Fried GM, Stabile B, Levine BA. Practice guidelines for patients with gastrointestinal surgical diseases. J Gastrointest Surg 1998;2:483-484.

Electronic copies: Not available at this time.

Print copies: Available from the Society for Surgery of the Alimentary Tract, Inc., 900 Cummings Center, Suite 221-0, Beverly, MA 01915; Telephone: (978) 927-8330; Fax: (978) 524-8890.

PATIENT RESOURCES

None available

NGC STATUS

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